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EXAMINER

GELIN, JEAN ALLAND

ART UNIT

PAPER NUMBER

2617

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/806,436

Applicant(s)

KANEKO, TAKAHIRO

Examiner

Jean A. Gelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/23/06 & 1/16/07
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Byrne et al. (US 5,659,598).

Regarding claim 1, Byrne teaches a wireless communication terminal (dual mode terminal in fig. 1), comprising: an operating unit such as the keypad of the dual terminal (fig. 1), reception field level detecting means for detecting the field level of the received radio wave, a control unit for controlling the terminal (measurement results obtained from the MS part, inherently the MS has detecting means to detect the level of signal strength for handover purpose, col. 2, lines 15-21 and col. 3, lines 43-63), a storage unit for storing measurement, col. 2, lines 15-21), a plurality of wireless communication units each matching a different communication system (col. 4, lines 37-51), and switch-over means for switching over one to another of the wireless communication units (i.e., in the handover procedure, col. 5), wherein: the terminal selects one of these communication systems on the basis of the reception field level of a first communication system that is currently selected and that of another second

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communication system (i.e., the PP starts handover when detecting the quality of connection is getting worse, col. 5, lines 1-30).

Regarding claim 2, Byrne teaches the terminal executes detection of the reception field level of the second communication system when the reception field level of the first communication system that is currently selected has become equal to or below a first threshold (col. 2, lines 15-60).

Regarding claims 3, 4, Byrne teaches the terminal selects the second communication system when the reception field level of the first communication system is equal to or below a second threshold that is lower than the first threshold and communication with the second communication system is possible (i.e., when the quality of signal is getting worse no communication is possible (col. 2, lines 15-60 and col. 5, lines 1-30)).

Regarding claim 5, Byrne teaches the terminal holds information on whether or not any communication system has priority (i.e., priority is based on the measurement results stored in the MS, col. 5, lines 3-11).

Regarding claims 6-7, Byrne teaches the terminal issues a notice signal when the second communication system has priority and communication with the second communication system is possible (i.e., the MS sends an H/O complete message or informs the PP of the complete message, col. 6, lines 8-16).

3. Claims 20-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al. (US 6,363,246).

Regarding claim 20, Williams teaches a control method for a wireless communication terminal (PCC 101) permitting use of a plurality of communication systems, comprising steps of: detecting a reception field level of a second communication system when the reception field level of a first communication system that is currently selected is at or below a prescribed threshold (i.e., communication channel is selected based on signal strength level, col. 13, line 61 to 14, line 48), and selecting either communication system on the basis of the reception field levels of said two communication systems (i.e., selection of cordless or cellular is based on signal strength level, col. 14, lines 17-67).

Regarding claim 21, Williams teaches wherein: a notice signal is issued when the second communication system has priority and communication with the second communication system is possible (col. 11, line 33 to col. 12, line 43).

Regarding claim 22, Williams teaches the second communication system is selected when the second communication system has priority and communication with the second communication system is possible (col. 11, line 6 to col. 12, line 44).

Regarding claim 23, Williams teaches control method for a wireless communication terminal (PCC 101) permitting use of a plurality of communication systems, comprising steps of: detecting whether or not a prescribed operation has been done on the terminal (i.e., detecting a prescribed operation, col. 10, line 38 to col. 11, line 45), detecting, when the prescribed operation has been done, a reception field level of another second communication system than a first communication system that is selected then (i.e., when the scanning period of

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the cordless base is done, scanning the cellular system for selection, col. 5, line 10 to col. 6, line 43 and col. 10, lines 38-67), and selecting either communication system on the basis of the reception field levels of said two communication systems (i.e., if the signaling data stream is received with sufficient quality, the mobile station is tuned to the cordless base station col. 10, line 38 to col. 11, line 45).

Regarding claim 24, Williams teaches the terminal is foldable (PCC 101 of fig. 1), and said prescribed operation is an operation to unfold the terminal (i.e., when PCC 101 is unfolded system identifier may appear in the number display, col. 11, lines 33-45).

Regarding claim 25, Williams teaches the prescribed operation is an operation on the operating unit of the terminal (i.e., physically open the phone 101 to receive message or dialing a number).

Regarding claim 26, Williams teaches the terminal is provided with a specific key (i.e., power on/off or talk/end call are typical keys for PCC 101), and said prescribed operation is an operation on the specific key (i.e., pressing the end key).

Regarding claim 27, Williams teaches a notice signal is issued when the second communication system has priority and communication with the second communication system is possible (col. 13, line 17 to col. 14, line 35).

Regarding claim 28, Williams teaches the second communication system is selected when the second communication system has priority and

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communication with the second communication system is possible (col. 13, line 17 to col. 14, line 35).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne et al. (US 5,659,598) in view of Williams et al. (US 6,363,246).

Regarding claims 8, 15, Byrne teaches a display unit and a speaker unit (typical components of the dual mode terminal). Byrne does not specifically teach a notice signal is at least either a display on the display unit or a sound emitted by the speaker unit.

However, the preceding limitation is known in the art of communications. Williams teaches an interface that controls light emitting diodes which are used to indicate to the user which system the PCC is currently receiving; for example a system identifier may appear in the display of the PCC 101 to indicate the user which system he is in (col. 4, lines 17-39, col. 11, lines 33-44, and col. 12, lines 31-42). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Williams within the system Byrne in order that the indication enables the user to determine which

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system he is in and decide whether he wishes to complete a radiotelephone in the indicated system.

Regarding claim 9, Byrne teaches detecting low quality of connection. Byrne fails to teach the terminal executes detection of the reception field level of the first communication system at prescribed intervals of time.

However, the preceding limitation is known in the art of communications. Williams teaches scanning the cordless base for a period of time to decide whether to maintain with communication with DECT is in (col. 10, line 38 to col. 11, line 45). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Williams within the system Byrne in order that the receiver of the PCC is instructed by its microprocessor to tune the frequency being used by the cordless base station at appropriate time.

Regarding claim 10, Byrne teaches detecting the quality of the signal for handover purpose. Byrne fails to teach a detection unit for detecting a prescribed operation of the terminal wherein: when the prescribed operation is done at the terminal, the terminal executes detection of the reception field level of the second communication system.

However, the preceding limitation is known in the art of communications. Williams teaches scanning the cordless base for a period of time corresponding detecting a prescribed operation (col. 10, line 38 to col. 11, line 45), when the scanning period of the cordless base is done corresponding to operation (col. 10, lines 38-67), if the signaling data stream is received with sufficient quality, the

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mobile station is tuned to the cordless base station (col. 10, line 38 to col. 11, line 45). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Williams within the system Byrne in order to switch from the cellular system to the cordless system based on the quality of the signal and vice versa, and improve the system efficiency.

Regarding claim 11, Byrne in view of Williams teaches all the limitations above. Williams further teaches the terminal selects the second communication system when communication with the first communication system is impossible and communication with the second communication system is possible (col. 5, line 20 to col. 6, line 30, col. 9, lines 10-22, and col. 10, line 27 to col. 11, line 67).

Regarding claim 12, Byrne in view of Williams teaches all the limitations above. Williams further teaches the terminal determines possibility or impossibility of communication according to a prescribed threshold (col. 9, lines 17-65).

Regarding claim 13, Byrne in view of Williams teaches all the limitations above. Williams further teaches the terminal issues a notice signal when the second communication system has priority and communication with the second communication system is possible (col. 13, line 17 to col. 14, line 35).

Regarding claim 14, Byrne in view of Williams teaches all the limitations above. Williams further teaches the terminal selects the second communication system when the second communication system has priority and communication

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with the second communication system is possible (col. 13, line 17 to col. 14, line 35).

Regarding claim 16, Byrne in view of Williams teaches all the limitations above. Williams further teaches the terminal is foldable (fig. 1, MS 101).

Regarding claim 17, Byrne in view of Williams teaches all the limitations above. Williams further teaches the prescribed operation is an operation to unfold the terminal (i.e., when PCC 101 is unfolded system identifier may appear in the number display, col. 11, lines 33-45).

Regarding claim 18, Byrne in view of Williams teaches all the limitations above. Williams further teaches the prescribed operation is an operation on the operating unit (i.e., physically open the phone 101 to receive message or dialing a number).

Regarding claim 19, Byrne in view of Williams teaches all the limitations above. Williams further teaches a specific key (such power on/off or talk/end call are typical keys for PCC 101), wherein: the prescribed operation is an operation on the specific key (i.e., pressing the end key).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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|-----------------|-----------------|------------|
| Kido | US 2002/0177418 | 11/28/2002 |
| Yahagi | US 7,065,360 | 06/20/2006 |
| Takahara et al. | US 5,450,613 | 09/12/1995 |

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| Park et al. | US 6,704,581 | 03/09/2004 |
| Bell III et al. | US 6,088,348 | 07/11/2000 |
| Dent | US 7,155,229 | 12/26/2006 |
| Reddy | US 7,089,005 | 08/08/2006 |

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEAN GELIN
PRIMARY EXAMINER

Jean Gelin 2/16/07